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Datasheet for ABIN7194638 CNDP1 Protein (His tag)

Overview

Quantity:	50 µg
Target:	CNDP1
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This CNDP1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human CNDP1 Protein (His Tag)(Active)
Sequence:	Ser27-His507
Characteristics:	A DNA sequence encoding the mature form of human CNDP1 (NP_116038.4) (Ser27-His507) was fused with a polyhistidine tag at the C-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	Measured by its ability to cleave carnosine (β-Ala-L-His) in a two-step assay. The specific activity is > 250 pmoles/min/µg.

Target Details

Target:	CNDP1
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Target Details

Alternative Name:	CNDP1 (CNDP1 Products)
Background:	<p>Background: CNDP1; also known as carnosine dipeptidase 1; glutamate carboxypeptidase-like protein 2 (CPGL-2) or carnosinase 1 (CN1); is a member of the M20 metalloprotease family. The CNDP1 gene contains trinucleotide (CTG) repeat length polymorphism in the coding region; which has been demonstrated to be associated with susceptibility to developing diabetic nephropathy; for carnosine protection against the adverse effects of high glucose levels on renal cells. In humans; CNDP1 is secreted from the liver into the serum. In other mammals; including rodents; CNDP1 is expressed exclusively within the kidney and lacks a signal peptide. CNDP1 protein is a secreted homodimeric dipeptidase that specifically hydrolyzes L-carnosine (β-alanyl-L-histidine); and is identified as human carnosinase expressed in the brain. CNDP1 has been associated with diabetic nephropathy in Europeans and European Americans; but not African-Americans. It was identified and confirmed as a risk factor; were cross-sectional and mostly in patients with type 2 diabetes. The polymorphisms of CNDP1 can be excluded as a risk factor for nephropathy in type 1 diabetes. In addition; CNDP1 is also suggested to be implicated in the actions of neuroprotection and neurotransmiting.</p> <p>Synonym: Beta-Ala-His Dipeptidase; CNDP Dipeptidase 1; Carnosine Dipeptidase 1; Glutamate Carboxypeptidase-Like Protein 2; Serum Carnosinase; CNDP1; CN1; CPGL2;HsT2308</p>

Molecular Weight:	55.3 kDa
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NCBI Accession:	NP_116038
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Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
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Reconstitution:	Please refer to the printed manual for detailed information.
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Buffer:	Lyophilized from sterile PBS, pH 7.4
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Storage:	4 °C,-20 °C,-80 °C
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Storage Comment:	<p>Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.</p>
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